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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,829	08/27/2001	Naoki Ayai	040256-0123	1089

7590

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David A. Blumenthal
FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, DC 20007-5109

EXAMINER

DINH, TUAN T

ART UNIT

PAPER NUMBER

2827

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/938,829

Applicant(s)

AYAI, NAOKI

Examiner

Tuan T Dinh

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 11-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Applicant's election of Group I, Embodiment IV (figures 21-25, and claims 1-10) in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim 9 does not read in figures 21-25; therefore, claim 9 is withdrawn from further consideration as being drawn to non-elected subject matter (i.e. silver based sheath is interposed between...superconductors and said ceramic layer).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cross-hatching of ceramic layer and metal sheath in figures 21-25 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 8 is objected to because of the following informalities:

Claim 8, line 3, change "a ceramic layers" to—a ceramic layer--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et al. (U. S. Patent 5,424,282).

Regarding claims 1, 8, and 10, Yamamoto discloses an oxide superconducting wire as shown in figures 1-11 comprising:

oxide superconductors (21-figure 2, column 7, line 25, also 81, 91, 101-figures 7-9);

a ceramic layer (23, column 7, line 23, and also 83, 93, 103-figures 7-9) enclosing and being in contact with each of said oxide superconductors and formed by extrusion, said ceramic layer (PtO-23) becoming non-superconducting at operational temperature of said oxide superconductors (21), and;

a metal sheath (22, column 7, line 24, and 82, 92, 102-figures 7-9) directly coating said ceramic layer.

Regarding claim 2, Yamamoto discloses the oxide semiconducting wire as shown in figures 7-9 wherein said oxide superconductors (81, 91, 101) are divided into a plurality of segments.

Regarding claim 3, Yamamoto discloses the oxide semiconducting wire as shown in figures 1-9 wherein said oxide superconductors are configured to spirally extend around the central axis of said oxide superconducting wire.

Regarding claim 4, Yamamoto discloses the oxide semiconducting wire as shown in figures 1-4 wherein said ceramic layer contains an oxide including at least one kind selected from the group consisting of bismuth, lead, strontium, calcium, barium, titanium, niobium, molybdenum, tantalum, tungsten, vanadium, zirconium, copper and silver (column 6, lines 15-27, PtO, column 7, line 23, column 8, lines 29, 55-68).

Regarding claim 5, Yamamoto discloses the oxide semiconducting wire as shown in figures 1-10 wherein said oxide superconductors are bismuth-based superconductors.

Regarding claim 6, Yamamoto discloses the oxide semiconducting wire as shown in figures 1-10 wherein said ceramic layers contains an oxide including an alkali earth metal and copper (column 6, lines 15-27, and column 8, line 29).

Regarding claim 7, Yamamoto discloses the oxide semiconducting wire as shown in figures 1-10 wherein said metal sheath include at least one kind selected from the group consisting of silver, copper, manganese, magnesium, antimony, iron, chromium, and nickel (column 4, lines 30-31).

Art Unit: 2827

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Meyer et al., Kohno et al., Ueyama et al., Celik et al., and Hikata et al. disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 703-306-5856. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TD
July 20, 2002



KAMAND CUNEO
PRIMARY EXAMINER